What is claimed is:

1. X-ray fluorescence analysis apparatus comprising:

a first housing for housing an X-ray tube for irradiating a sample to be measured with primary X-rays;

a second housing for housing a high-voltage power supply for supplying a high-voltage to the X-ray tube;

and a high-voltage cable connecting the X-ray tube and the high-voltage power supply,

wherein at least one end of the high-voltage cable is a high-voltage connector,

the high-voltage connector is constituted by a core, an insulator covering the core, and a fixing screw,

there is provided a detachable pipe-shaped sheath, covering a core of the high-voltage connector and covering the core, having threading corresponding to the fixing screw for enabling fixing,

and the sheath has a conductor formed at an inner surface thereof so that the core of the high-voltage connected makes contact when fixing to the fixing screw.